Power Protection Solutions

for Data Centers and Facilities, Networks and Servers, Industrial, PCs and Workstations, and Mobile Computing Applications

APC

Legendary Reliability®

"In a world that demands zero downtime, system availability is essential. As technologies and environments change via server consolidation, migration and centralization, businesses must be ready to adapt, quickly and constantly. The foundation of highly available networks, network-critical physical infrastructure (NCPI), is crucial to system availability and a company's agility. From surge protection to backup power, APC's end-to-end offering has a product for each price and performance criteria."

"From the challenge of operating an on-demand data center, to the implementation of high density applications or a VoIP network, to increasing mobile computing productivity, APC has the technology, systems and support to empower customers to meet their objectives."

Rodger B. Dowdell Jr.,
President and Chief Executive Officer

Frost and Sullivan Names APC 2005 Data Center Solutions Company of the Year

APC has received the 2005 Data Center Solutions Company of the Year Award from growth consulting firm Frost & Sullivan. This honor is based on a number of criteria, including market share growth, new market penetration, evidence of success derived from innovative strategies, and technological innovation and leadership.

The award honors APC's progress in the data center and large systems area, which the company estimates to be a $7 billion market for network-critical physical infrastructure (NCPI). Demand for APC's InfraStruXure™

architecture for data centers, which integrates power, cooling, management and services within a rack-optimized design, nearly doubled in 2004 from 2003. APC was not only able to expand its customer base, but also showed foresight by recognizing the conditions that would create a market for a new class of product: an on-demand solution that addresses the challenges related to the data center life cycle including planning, installation, operations and end of life.

"For many years, APC's core competency has been in the low power range mar-

ket," said Farah Saeed, program manager for Backup Power Solutions with Frost & Sullivan. "But they were the first to recognize that the growth of network-critical physical infrastructure in data centers was creating an unmet need. APC responded with InfraStruXure, an innovative solution that fulfills the NCPI requirements of data centers while providing the flexibility needed to respond to business changes. InfraStruXure's standardized, modular component approach helps speed deployment, improve adaptability, and increase system availability, while reducing total cost of ownership."

Power is vital to the Information Age. Without electricity, the machines that create, transmit, or store our data, help us communicate, entertain us, or assist us in a multitude of ways cease to operate. In less critical circumstances, this is merely an inconvenience. When a company depends on its electronics to do business, the effects of power-related downtime are much more costly.

As the thought leader in power protection, APC offers a multitude of availability solutions using a fresh, innovative approach to meeting the real-world needs of customers. Recognizing that downtime is not an option, and that the status quo was meant to be challenged, APC strives to find new ways in which to ensure availability wherever data is created, transmitted, or stored.

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System-level Solutions for Data Centers On Demand

InfraStruXure™

DATA CENTERS ON DEMAND

Modular Systems are complete, pre-packaged systems that users can quickly and easily select for specific IT environments without spending the time needed for customization. They are an ideal solution to rapidly respond to market trends such as increased density and converged voice/data applications.

Mobile Systems, such as InfraStruXure™ Express are true on-demand mobile data centers, which can be provided overnight and are capable of supporting up to 250 servers. These solutions are designed for businesses working on transitional IT projects or developing robust business continuity and disaster recovery programs.

For users that prefer to customize their NCPI, **Conventional Systems** offer a complete range of individual components and services required to build a data center or server room. These systems have standard lead times and installation requirements that are typical in unique or large IT environments.

APC's InfraStruXure™ is on-demand architecture for network-critical physical infrastructure (NCPI). The InfraStruXure design, which integrates power, cooling, rack, management and services, allows the selection of standardized components to create a solution through modular and mobile configurations. This standardization enables an easily scalable architecture designed to meet changing needs and future expansion. This award-winning, patent-pending approach provides increased availability, improved adaptability and speed of deployment as well as lower total cost of ownership for IT environments – from wiring closets to server rooms to data centers.

With integrated management becoming a critical component in the NCPI, APC offers comprehensive management solutions including InfraStruXure Manager. A browser accessible, user-friendly tool, InfraStruXure Manager provides monitoring of power, cooling, and environmental management at the rack or room level. APC also provides professional services that optimize the NCPI over the complete data center life cycle, including planning, installation, operation and end-of-life services.

For more information on InfraStruXure™, see page 26
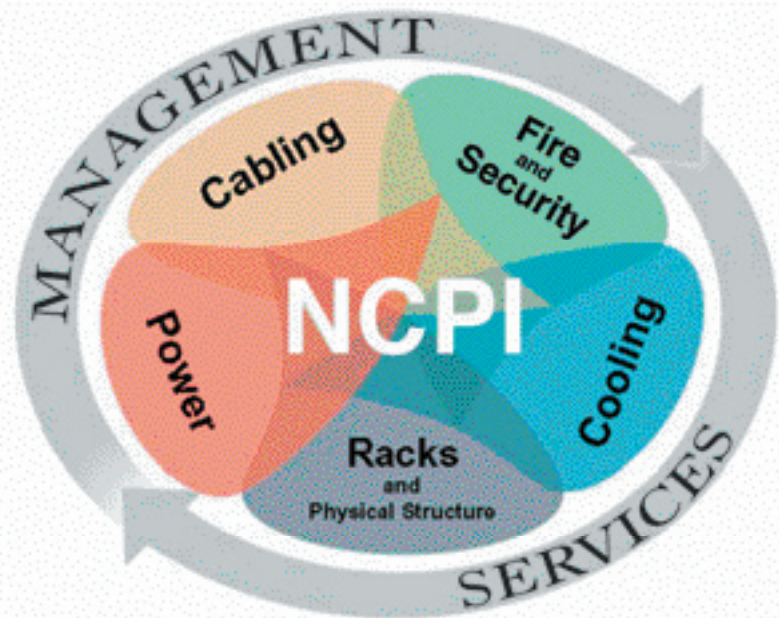
APC Power Protection Solutions

APC Power Solutions cover a wide range of requirements. The more mission-critical the application, the higher the necessity for as little downtime as possible, mandating continued operation through outages of any length. Some organizations might not require such high availability, but require automatic, safe shutdown of important software and operating systems, keeping important data secure. Any power solution should, at the very least, prevent physical damage to hardware from transients (surges, spikes, sags, etc.).

POWER SOLUTIONS - UPS OVERVIEW BY ENVIRONMENT

IT Environment	Range	Best Price ("Good")	Best Value ("Better")	Best Performance ("Best")	
Data Center/Facilities					
Small Data Center (from 5 -20 Racks)	10-40kW	Smart-UPS® VT*	Smart-UPS® VT* + Battery Packs	Symmetra® PX	
Medium Data Center (from 20 - 100 Racks)	40-80kW	Silcon®	Silcon® + Battery Packs	Symmetra® PX	
Medium Data Center (from 20 - 100 Racks)	80-200kW	Silcon®	Silcon® + Battery Packs	Symmetra® MW	
Large Data Center (>100 Racks)	200kW+	Silcon®	Silcon® + Battery Packs	Symmetra® MW	
Server, Voice/Data Network					
Server Rooms (from 1 - 5 Racks)	3-9.9kW	Smart-UPS® RT	Smart-UPS® RT + Battery Packs	Symmetra® LX	
Wiring Closet (from 1 - 3 Racks)	500-3,000W	Smart-UPS®	Smart-UPS® XL	Symmetra®	
Server/Networking (<1 - 3 Servers)	1-865W	Smart-UPS® SC	Smart-UPS®	Smart-UPS® XL	
Industrial					
General Industrial Market	10-100kVA	AIS 3000	AIS 5000	AIS 5000 + Battery Packs	
PC/Workstation					
UPS	350-1500VA	Back-UPS® ES	Back-UPS® CS	Back-UPS® RS	
Surge Protection	1-11 outlets	SurgeArrest® Essential	SurgeArrest® Home/Office	SurgeArrest® Performance	

* Up to 32kW

One of APC's core competencies is UPS protection for the wide-ranging IT applications of today's businesses. Whether you need power protection for a few servers or for a large data center installation, APC has the optimal UPS for your specific IT environment. Offering scalable, redundant power protection for both single- and three-phase applications, APC's modular UPS solutions provide the foundation of building and scaling near-continuous power systems with a flexible range of power capacities.

IT Environment	Range	Best Price ("Good")	Best Value `("Better")	Best Performance ("Best")
Data Center/Facilities				
Small Data Center (from 5 -20 Racks)	10-40kW	Smart-UPS® VT*	Smart-UPS® VT+ Battery Packs*	Symmetra® PX
Medium Data Center (from 20 - 100 Racks)	40-80kW	Silcon®	Silcon® + Battery Packs	Symmetra® PX
Medium Data Center (from 20 - 100 Racks)	80-200kW	Silcon®	Silcon® + Battery Packs	Symmetra® MW
Large Data Center (>100 Racks)	200kW+	Silcon®	Silcon® + Battery Packs	Symmetra® MW

* Up to 32kW

Smart-UPS® VT
Performance power protection with scalable runtime for small data centers

Range: 10 to 40kVA in 400V, 10 to 30kVA in 208V and 20 to 30kVA in 480V

Smart-UPS® VT offers centralized three-phase power protection with the reliability of the award winning Smart-UPS family. Ideal for small data centers, large retail stores, regional offices, and dense power requirements, the Smart-UPS VT includes dual-mains input, automatic and maintenance bypasses, and scalable runtime with hot-swappable batteries for increased availability. Low cost of ownership is achieved through best-in-class efficiency and a reduction in rating of electrical infrastructure (wires, transformers, and generators) due to Smart-UPS VT's Soft Start feature.

APC's Network Management Card with temperature monitoring provides remote monitoring and management through a simple Web/SNMP interface and provides integration with InfraStruXure™ Manager. Serviceability is greatly enhanced by user-replaceable batteries, manageable extended run frames and included startup and standard onsite warranty services. All of these features make Smart-UPS VT the easiest UPS in its class to deploy, manage and maintain.

Input Power Factor Correction
Minimizes installation costs by enabling the use of smaller generators and cabling.

Hot-swappable Batteries
Ensures clean, uninterrupted power to protected equipment while batteries are being replaced.

Scalable Runtime
Allows additional run time to be quickly added as needed.

Dual Mains Input
Increases availability by allowing the UPS to be connected to two separate power sources.

Manual Maintenance Bypass
Reduces installation costs by eliminating the need for an external mechanical bypass.

Network Manageable
Provides remote management of the UPS over the network.

Symmetra® PX

High-performance, redundant power protection with scalable power and runtime for data centers

Range: 10-80kW N+1

Symmetra® PX, three-phase input/three-phase output (3:3), is a single unit, composed of modular components. This modular architecture provides the foundation of building and scaling near-continuous availability power systems with a flexible range of power capacity. The Symmetra PX packages the high availability requirements of easy power and runtime scalability into a very small footprint.

Configurable for N+1 Internal Redundancy
Provides high availability through redundancy by allowing configuration with one more Power Module than is necessary to support the connected load.

Power Modules Connected in Parallel
Enhances availability by allowing immediate, seamless recovery from isolated module failures.

Battery Modules Connected in Parallel
Delivers higher availability through redundant batteries.

Scalable Power Capacity
Reduces UPS over-sizing costs today by allowing quick upgrades later.

Modular Design
Provides fast serviceability and reduced maintenance requirements via self-diagnosing, field-replaceable modules.

User-replaceable Power Modules
Enables simple upgrades and replacements of the Power Modules.

User-replaceable Batteries
Increases availability by allowing a trained user to perform upgrades and replacements of the batteries reducing Mean Time to Repair (MTTR).

Network Manageable
Provides remote management of the UPS over the network.

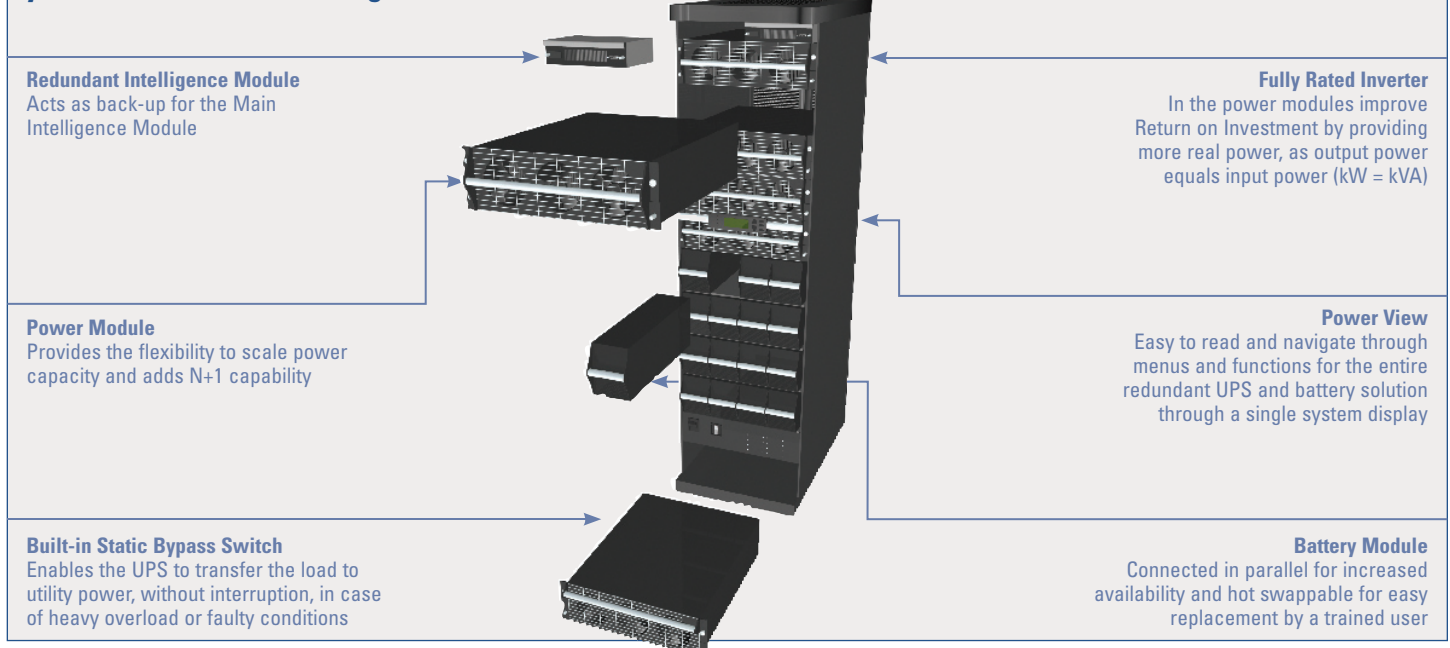**Fully-rated Power kVA Equals kW**
Reduces cost by eliminating the need for an over-sized UPS for Power Factor Corrected (PFC) loads.

Generator Compatible
Ensures clean, uninterrupted power to protected equipment when generator power is used.

Symmetra® PX Product Design Benefits

Redundant Intelligence Module
Acts as back-up for the Main Intelligence Module

Power Module
Provides the flexibility to scale power capacity and adds N+1 capability

Built-in Static Bypass Switch
Enables the UPS to transfer the load to utility power, without interruption, in case of heavy overload or faulty conditions

Fully Rated Inverter
In the power modules improve Return on Investment by providing more real power, as output power equals input power (kW = kVA)

Power View
Easy to read and navigate through menus and functions for the entire redundant UPS and battery solution through a single system display

Battery Module
Connected in parallel for increased availability and hot swappable for easy replacement by a trained user

Silcon®

Performance power protection with scalable runtime for data centers and facilities

Range: 40 to 80kW in 208V, 10 to 500kW in 480V and 60 to 480 kW in 400V

The APC Silcon® Series has the load capacity to serve a broad range of electrical equipment, from mainframe computers to large corporation-wide installations, production lines, electronic control systems and telecommunication equipment. Up to nine Silcon units can be paralleled to serve special demands for power upgrading or redundancy.

Input Power Factor Correction
Eliminates the need for an external phase-compensation unit and minimizes installation costs by enabling the use of smaller generators and cabling.

Fully-rated Power kVA Equals kW
Reduces cost by eliminating the need for an over-sized UPS for Power Factor Corrected (PFC) loads.

Network Manageable
Provides remote management of the UPS over the network.

Generator Compatible
Ensures clean, uninterrupted power to protected equipment when generator power is used.

Manageable External Batteries
Reduces preventative maintenance service needs by monitoring the health and status of the external batteries and their expected runtime.

Parallel-capacity Capable
Increases total power capacity by using multiple UPSs simultaneously.

Parallel-redundant Capable
Power the connected equipment with multiple UPSs to increase system redundancy.

Symmetra® MW

High performance, redundant power protection with scalable power and runtime for data centers and facilities

Range: 400kW to 1.6MW

Symmetra® MW redefines high-power UPS technology as a modular, fault-tolerant UPS in the 400-1600 kilowatt range. Ideal for large data centers, complete buildings, healthcare and other critical facility protection requirements, the Symmetra MW can be scaled for rigorous and changing electrical demands. Symmetra MW provides increased availability through internal N+1 configurability, predictive failure notification and multi-module paralleling features. Setting a new standard for low cost of ownership Symmetra MW delivers best-in-class efficiency and a reduction in rating of electrical infrastructure- wires, transformers and generators. Slide-in/out power modules, manageable external batteries and self-diagnosing features greatly reduce mean time to repair. Combined with a wide range of line-up and match options Symmetra MW provides a customizable system in a standardized design for any large on-demand network-critical physical infrastructure.

Modular Design
Provides fast serviceability and reduced maintenance requirements via self-diagnosing, field-replaceable modules.

Scalable Power Capacity
Reduces UPS over-sizing costs today by allowing quick upgrades later.

Fully-rated Power kVA Equals kW
Reduces cost by eliminating the need for an oversized UPS for Power Factor Corrected (PFC) loads.

Input Power Factor Correction
Eliminates the need for an external phase-compensation unit and minimizes installation costs by enabling the use of smaller generators and cabling.

Configurable for N+1 Internal Redundancy
Provides high availabilty through redundancy by allowing configuration with one more Power Module than is necessary to support the connected load.

Generator Compatible
Ensures clean, uninterrupted power to protected equipment when generator power is used.

Power Modules Connected in Parallel
Enhances availability by allowing immediate, seamless recovery from isolated module failures.

Battery Modules Connected in Parallel
Delivers higher availability through redundant batteries.

LCD Display
Provides schematic overview of critical data for guided operation and troubleshooting on color LCD touchscreen.

InfraStruXure™
Power Distribution Units

The InfraStruXure™ PDU is configured to order and pre-engineered for Information Technology (IT) equipment in small to large data centers

Range: 3-Phase 40, 60, 80, and 150 kW

Enable increased availability of your data center by real time branch current monitoring and threshold setting with local and advanced remote notification. The Configure-to-Order (CTO) process allows for the factory installation and testing of breakers, branch circuit monitoring boards, load-test ports, and cut-to-size whips. The InfraStruXure™ PDU can be deployed in non-raised floor environments for reduced installation costs and increase agility. Build an InfraStruXure PDU to your exact specifications to increase speed of deployment, reliability, and lower your total cost of ownership.

Alarm Thresholds
Current Transformers on each circuit that can provide amp ratings on each circuit position to prevent circuit breaker overloads.

Local and Web-based Monitoring
Status available to customers both in the data center and remotely.

Remote Management Capabilities
Full-featured network management interfaces that provide standards-based management via Web, SNMP, and Telnet. Allows users to access, configure, and manage units from remote locations to save valuable time. Associated with this feature is the ability to quickly and easily upgrade the firmware via network download to installed units for future product enhancements.

Wide Range of Applications
Configure-to-order process allows APC to configure, install, and test complete system before shipping.

Circuit Breaker Panel
Provides breaker positions for distribution to racks and power zones.

System Mobility
PDU equipment can easily be relocated to accommodate a changing data center environment.

InfraStruXure™ Systems for High Density

Deploying new technology such as blade servers and server consolidation can easily create environments with greater than 3kW per rack power density. When deploying these high density applications, IT or Facilities Managers may find they have hot spots and cooling problems, unknown data center capabilities, the possibility for requiring oversized NCPI, special environments to deploy properly or the need to slow technology adoption based on high density deployment challenges. APC InfraStruXure™ Systems are designed to address these NCPI challenges with integrated systems designed specifically for high density.

Whether you need power protection for a few servers or for a large data center installation, APC has the optimal UPS for your specific IT environment. With over 10 million installed, APC's Smart-UPS® and Symmetra®UPSs provide the foundation of near-continuous availability systems. These solutions, ranging from 250VA to 16kVA, are perfect for networking equipment including entry-level to high-performance storage, switches, and servers. APC Network and Server UPS tower, rack-mount (in an array of 'U' heights), or rack/tower convertible models easily fit any environment including space-constrained server rooms, wiring closets, and small business offices.

IT Environment	Range	Best Price ("Good")	Best Value `("Better")	Best Performance ("Best")
Server, Voice/Data Network				
Server Rooms (from 1 - 5 Racks)	3-9.9kW	Smart-UPS® RT	Smart-UPS® RT+ Battery Packs	Symmetra® LX
Wiring Closet (from 1 - 3 Racks)	500-3,000W	Smart-UPS®	Smart-UPS® XL	Symmetra®
Server/Networking (<1 - 3 Servers)	1-865W	Smart-UPS® SC	Smart-UPS®	Smart-UPS® XL

InfraStruXure™ Systems for First Time Data Center and Server Room Users

The challenges of improving, and even maintaining, IT productivity, have put pressures on today's IT and Facility Managers. As some are tasked with developing data centers for the first time, they may find they have limited IT resources, budget, experience or skill set for designing, operating or building data centers. They may face challenges in planning for unpredictable growth or limited space for a data center. APC InfraStruXure™ Systems are ideal for these "first-time" data center and server rooms users.

For more information on InfraStruXure™ Systems for First Time Data Center and Server Room Users, see page 26.

Smart-UPS® SC

Power protection for entry-level servers, voice and data networks

Range: 420-620VA Tower, 250-1500VA Rack/Tower Convertible 1U-2U

APC Smart-UPS® SC is ideal for small and medium businesses looking to protect entry-level servers and networking equipment from power disturbances and outages. The Smart-UPS® SC features network grade runtime, hot swap batteries, and built-in data line protection for worry free uninterruptible power protection for increased availability. The included PowerChute® Business Edition software, which has an installed base in the millions, gives entry-level network and server users a proven UPS management solution.

PowerChute® Business Edition also manages other Smart-UPS® models, allowing easy upgrades as applications change, without having to replace software or retrain administrators. Most Smart-UPS® SC models can be installed in either a tower or rack configuration, allowing standardization across multiple applications. Built on the same standards as the award-winning Smart-UPS®, with over 10 million installed, Smart-UPS® SC provides the basic features and manageability needed to protect entry-level applications.

Network Manageable
Monitor and control the UPS remotely via included PowerChute software.

Boost and Trim Automatic Voltage Regulation (AVR)
Gives higher application availability by correcting low and high voltage conditions without using the battery.

Dataline Surge Protection
Provides protection of connected equipment from power surges on the data lines.

User-replaceable Batteries
Increases availability by allowing a trained user to perform upgrades and replacements of the batteries reducing Mean Time to Repair (MTTR).

Audible Alarms
Provides notification of changing utility power and UPS conditions.

LED Status Indicators
Enables quick understanding and response to visual indicators showing UPS status.

Smart-UPS®

Performance power protection for servers, and voice and data networks

Range: 750-5000VA Tower, 750-5000VA Rack Mount 1U-5U

APC Smart-UPS® protects critical data by supplying reliable, network-grade power in either traditional tower or rack-optimized form factors. Award-winning Smart-UPS® is the perfect UPS for protecting business critical servers, voice and data networks, point of sale, retail/bank back office and ATM's. High real power output (watts), generous runtime, sine wave output, 16-segment LED visual display, and intelligent battery management make Smart-UPS® the leading server class UPS. Included PowerChute® management software provides IT administrators the comfort of safe system shutdown and advanced UPS management. Additional manageability is available through the SmartSlot, an internal accessory slot that allows installation of optional accessories to enhance the performance of your UPS. Designed and manufactured by APC and fully backed with free 24x7 technical support, Smart-UPS® remains the industry standard for all network UPSs. With over 10 million units installed worldwide and over 15 years of proven performance, Smart-UPS® is a UPS businesses trust for their critical applications.

Network Manageable
Monitor and control the UPS remotely via included PowerChute software or APC's Network Management Card (included in all models above 3kVA).

Intelligent Battery Management
Maximizes battery performance, life, and reliability through intelligent, precision charging.

Boost and Trim Automatic Voltage Regulation (AVR)
Gives higher application availability by correcting low and high voltage conditions without using the battery.

User-replaceable Batteries
Increases availability by allowing a trained user to perform upgrades and replacements of the batteries reducing Mean Time to Repair (MTTR).

LED Status Indicators
Enables quick understanding and response to visual indicators showing UPS status.

Audible Alarms
Provides notification of changing utility power and UPS conditions.

Smart-UPS® XL
Performance power protection with scalable runtime for servers, and voice and data networks

Range: 750-2200VA Tower, 1400-3000VA Rack Mount 2U-5U

APC Smart-UPS® XL protects your data by supplying reliable, network-grade power and scalable runtime in tower or rack-mount form factors. Customers can configure up to 10 matching battery packs for runtimes exceeding 24 hours, if needed. Typical applications requiring longer runtime include critical application servers and storage, IP and PBX based voice networks, and enterprise network switches and hubs. Included PowerChute® management software provides IT administrators the comfort of safe system shutdown and advanced UPS management. Additional manageability is available through the SmartSlot, an internal accessory slot that allows installation of optional accessories to enhance performance. Engineered with the same standards as the award-winning Smart-UPS®, with over 10 million installed, the Smart-UPS® XL adds the advantage of unsurpassed runtime capability for those business applications that demand continual uptime.

Network Manageable
Monitor and control the UPS remotely via included PowerChute®I software or APC's Network Management Card (included in all models above 3kVA).

Scalable Runtime
Allows additional run time to be quickly added as needed.

Intelligent Battery Management
Maximizes battery performance, life, and reliability through intelligent, precision charging.

Boost and Trim Automatic Voltage Regulation (AVR)
Gives higher application availability by correcting low and high voltage conditions without using the battery.

User-replaceable Batteries
Increases availability by allowing a trained user to perform upgrades and replacements of the batteries reducing Mean Time to Repair (MTTR).

LED Status Indicators
Enables quick understanding and response to visual indicators showing UPS status.

Audible Alarms
Provides notification of changing utility power and UPS conditions.

Smart-UPS® RT

Performance power protection with scalable runtime for space-constrained server rooms, and voice and data networks

Range: 1-10kVA Rack/Tower Convertible 2U-6U

APC Smart-UPS® RT is a family of high-density, performance UPSs for voice and data networks, medical labs, and light industrial applications. Capable of supporting 10kVA in a 6U rack/tower convertible form, users can support power hungry blade servers or heavily loaded equipment racks. This flexible form factor allows standardization across multiple applications. High power internal chargers allow virtually unlimited additional matching battery packs to comply with aggressive runtime demands of business-critical systems. Customers with harsh power environments looking for extremely tight voltage and frequency regulation, internal bypass, and input power factor correction typical of double conversion online topology will get them in the Smart-UPS® RT.

Network Manageable
Monitor and control the UPS and access environmental information remotely via included PowerChute® software or APC's Network Management Card with temperature monitoring (included in all models above 3kVA).

Automatic Internal Bypass
Supplies utility power to the connected loads in the event of a UPS overload condition or fault.

Scalable Runtime
Allows additional run time to be quickly added as needed.

Intelligent Battery Management
Maximizes battery performance, life, and reliability through intelligent, precision charging.

Frequency and Voltage Regulation
Gives higher application availability by correcting poor frequency and voltage conditions without using the battery.
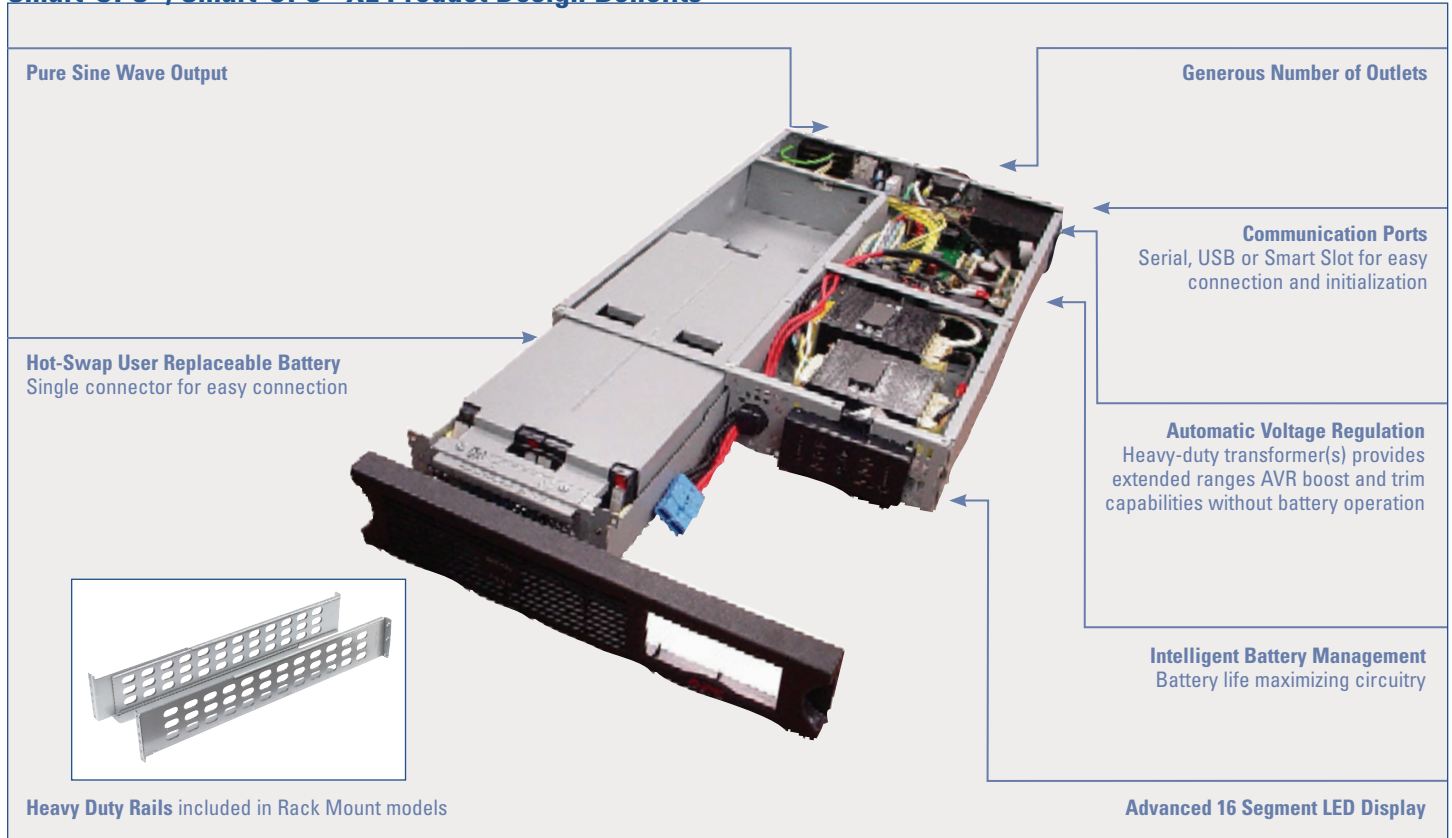
User-replaceable Batteries
Increases availability by allowing a trained user to perform upgrades and replacements of the batteries reducing Mean Time to Repair (MTTR).
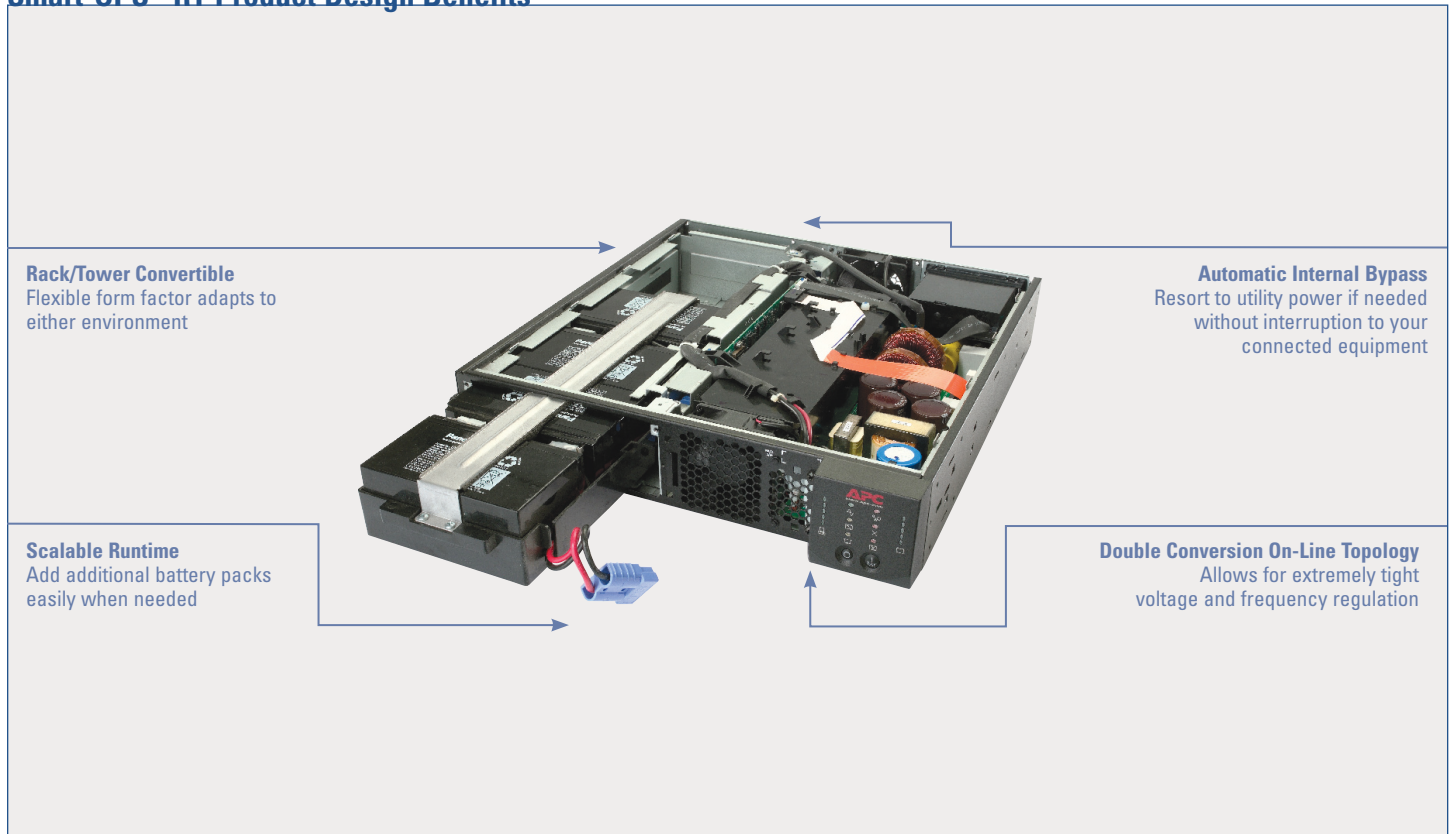
LED Status Indicators
Enables quick understanding and response to visual indicators showing UPS status.

Smart-UPS®, Smart-UPS® XL Product Design Benefits

Pure Sine Wave Output

Generous Number of Outlets

Communication Ports
Serial, USB or Smart Slot for easy connection and initialization

Hot-Swap User Replaceable Battery
Single connector for easy connection

Automatic Voltage Regulation
Heavy-duty transformer(s) provides extended ranges AVR boost and trim capabilities without battery operation

Intelligent Battery Management
Battery life maximizing circuitry

Heavy Duty Rails included in Rack Mount models

Advanced 16 Segment LED Display

Smart-UPS® RT Product Design Benefits

Rack/Tower Convertible
Flexible form factor adapts to either environment

Automatic Internal Bypass
Resort to utility power if needed without interruption to your connected equipment

Scalable Runtime
Add additional battery packs easily when needed

Double Conversion On-Line Topology
Allows for extremely tight voltage and frequency regulation

Symmetra®

High performance, redundant power protection with scalable power and runtime for servers, and voice and data networks

Range: 2-6kVA N+1 Redundant Rack Mount 8U-10U

Engineered to deliver the highest level of business continuity possible, Symmetra®I uses a modular, redundant architecture that can scale power and runtime as demand increases or when higher levels of availability are required. Symmetra's integrated manageability, and hot-swappable, user replaceable power, battery, and intelligence modules enable easy, fast maintenance and serviceability. Its 2-6kVA N+1 redundant rack-optimized form factor makes Symmetra ideal for protecting critical server racks and network rooms. Typical applications include Web and other key application servers, IP based and traditional PBX voice solutions, and enterprise type network switches.
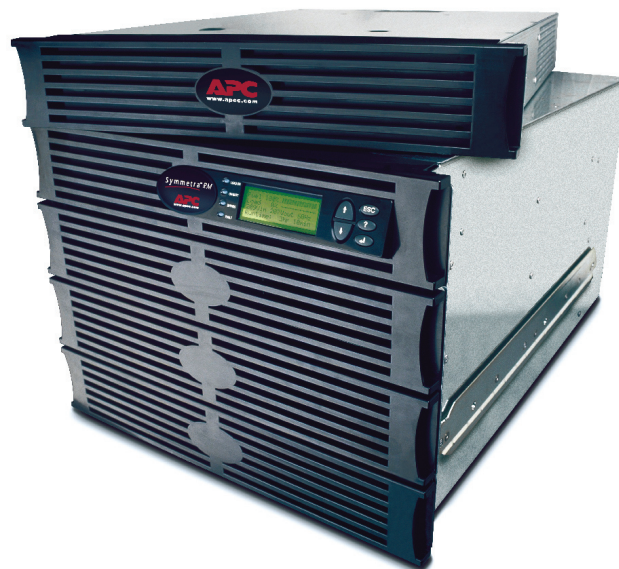
Network Manageable
Monitor and control the UPS and access environmental information remotely via the embedded APC Network Management Card with temperature monitoring.

Modular Design
Provides fast serviceability and reduced maintenance requirements via self-diagnosing, hot-swappable, and field-replaceable modules.

Configurable for N+1 Internal Redundancy
Provides high availability through redundancy by allowing configuration with one more Power Module than is necessary to support the connected load.

Scalable Power Capacity
Reduces UPS over-sizing costs today by allowing quick upgrades later.

Manageable External Batteries
Reduces preventative maintenance service needs by monitoring the health and status of the external batteries and their expected runtime.

LCD Display
Manage the UPS locally through a text-based display that allows quick diagnosis via stored alarm conditions and events.
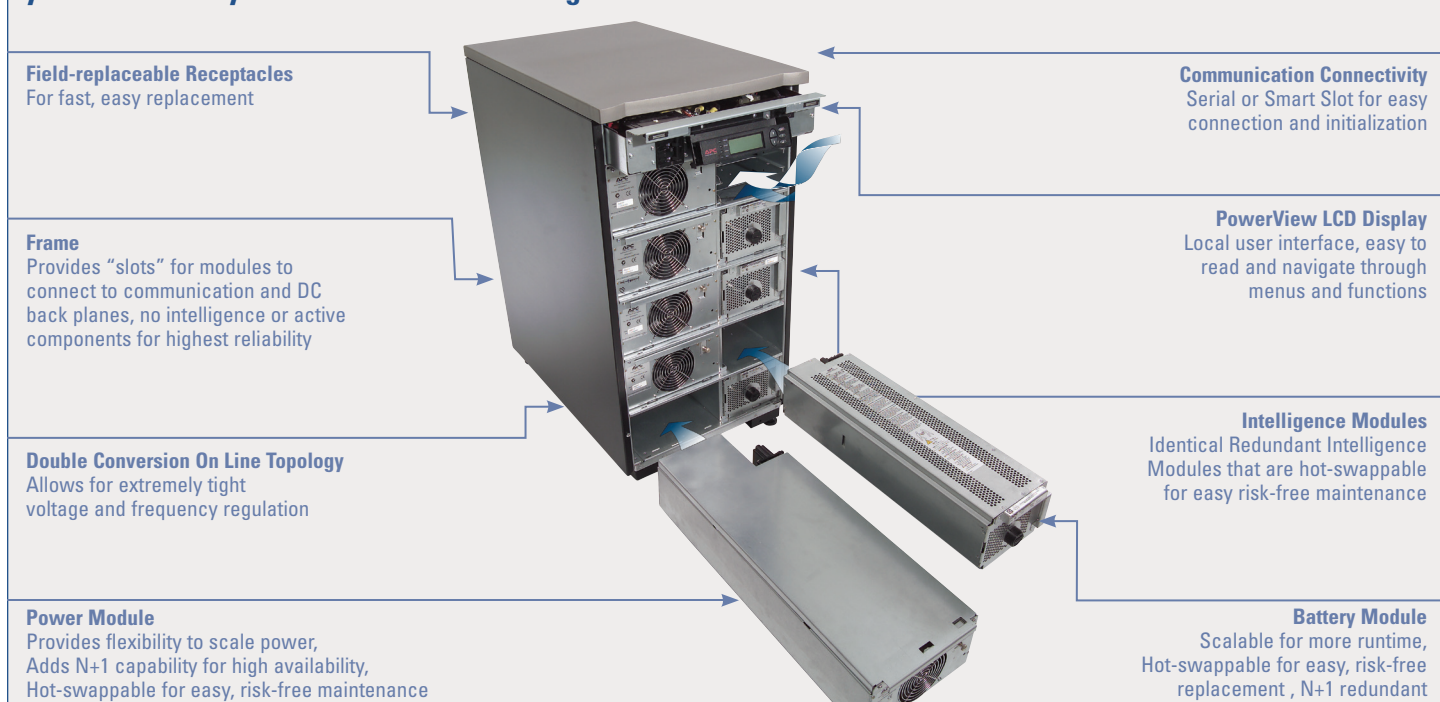
Automatic Internal Bypass
Supplies utility power to the connected loads in the event of a UPS overload condition or fault.

Frequency and Voltage Regulation
Gives higher application availability by correcting poor frequency and voltage conditions without using the battery.

Symmetra® and Symmetra® LX Product Design Benefits

Field-replaceable Receptacles
For fast, easy replacement

Frame
Provides "slots" for modules to connect to communication and DC back planes, no intelligence or active components for highest reliability

Double Conversion On Line Topology
Allows for extremely tight voltage and frequency regulation

Power Module
Provides flexibility to scale power, Adds N+1 capability for high availability, Hot-swappable for easy, risk-free maintenance

Communication Connectivity
Serial or Smart Slot for easy connection and initialization

PowerView LCD Display
Local user interface, easy to read and navigate through menus and functions

Intelligence Modules
Identical Redundant Intelligence Modules that are hot-swappable for easy risk-free maintenance

Battery Module
Scalable for more runtime, Hot-swappable for easy, risk-free replacement , N+1 redundant

Symmetra® LX

High performance, redundant power protection with scalable power and runtime for space-constrained server rooms and voice and data networks

Range: 4-16 kVA N+1 Redundant Rack/Tower Convertible 13U-19U, 4-16kVA N+1 Redundant Extended Run Tower

Engineered to deliver the highest level of business continuity possible, the Symmetra® LX uses a modular, redundant architecture that can scale power and runtime as demand increases or when higher levels of availability are required. With built-in network manageability, and rack-optimized and tower models available from 4-16 kVA N+1 redundant, the online Symmetra LX is the choice to protect high-performance IT and Telecom equipment in business-critical server and network rooms. A flexible rack/stack design offers unmatched runtime and power capacity in space constrained environments. Symmetra LX allows incredibly fast upgrades and maintenance with virtually all of its parts contained in field-swappable components. These include hot-swappable, user-replaceable power, battery, and intelligence modules, management cards, LCD display, fans, and external battery frames. Additionally the wiring tray, frame electronics, receptacles, and casters can be swapped in minutes if necessary. Symmetra LX achieves industry-leading footprint or U-space needed in an equipment rack, increased speed and ease of deployment, and reduced repair time.

Network Manageable
Monitor and control the UPS and access environmental information remotely via included PowerChute® software or APC's Network Management Card with temperature monitoring (included in all models above 3kVA).

Modular Design
ides fast serviceability and reduced maintenance irements via self-diagnosing, hot-swappable, and -replaceable modules.

figurable for N+1 Internal Redundancy
ides high availability through redundancy by

Scalable Power Capacity
Reduces UPS over-sizing costs today by allowing quick upgrades later.

Manageable External Batteries
Reduces preventative maintenance service needs by monitoring the health and status of the external batteries and their expected runtime.

Shippable with Modules Installed
Enables pre-installation UPS staging and testing and faster installation.

LCD Display
Manage the UPS locally through a text-based display that allows quick diagnosis via stored alarm conditions and events.

Automatic Internal Bypass
Supplies utility power to the connected loads in the event of a UPS overload condition or fault.

Frequency and Voltage Regulation
Gives higher application availability by correcting poor frequency and voltage conditions without using the battery.
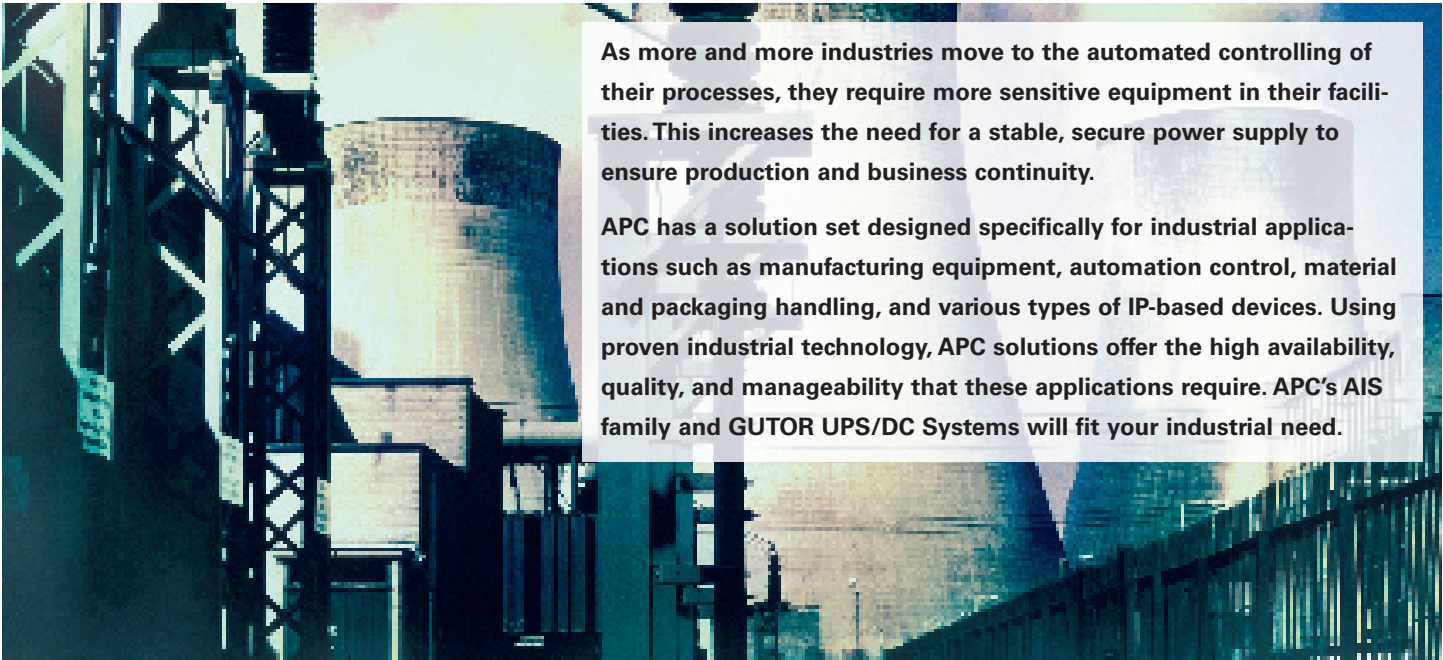
As more and more industries move to the automated controlling of their processes, they require more sensitive equipment in their facilities. This increases the need for a stable, secure power supply to ensure production and business continuity.

APC has a solution set designed specifically for industrial applications such as manufacturing equipment, automation control, material and packaging handling, and various types of IP-based devices. Using proven industrial technology, APC solutions offer the high availability, quality, and manageability that these applications require. APC's AIS family and GUTOR UPS/DC Systems will fit your industrial need.

IT Environment	Range	Best Price ("Good")	Best Value `("Better")	Best Performance ("Best")
Industrial				
General Industrial Market	10-100kVA	AIS 3000	AIS 5000	AIS 5000 + Battery Packs

AIS® 3000

Performance power protection with scalable runtime for industrial applications, automation control, and critical manufacturing processes

Range: 10 to 40kVA (30kVA in 208V)

The AIS® 3000 offers a new way for plant and facility managers to achieve reliable and cost-effective protection for applications within industrial and manufacturing facilities. Legacy industrial solutions require on-site customization to fit these harsh environments. A modular design with factory installed hot-swappable batteries and electronics reduce configuration time and make the AIS 3000 easy to deploy and maintain. Standard reliability features include NEMA 12/IP51 protection, a standard 2 millimeter thick steel plate enclosure, and user-replaceable air filters. The AIS 3000 ships with dual mains input and a built-in maintenance bypass switch increasing system availability.

Dual Mains Input
Increases availability by allowing the UPS to be connected to two separate power sources.

Input Power Factor Correction
Minimizes installation costs by enabling the use of smaller generators and cabling.

Manual Maintenance Bypass
Reduces installation costs by eliminating the need for an external mechanical bypass.
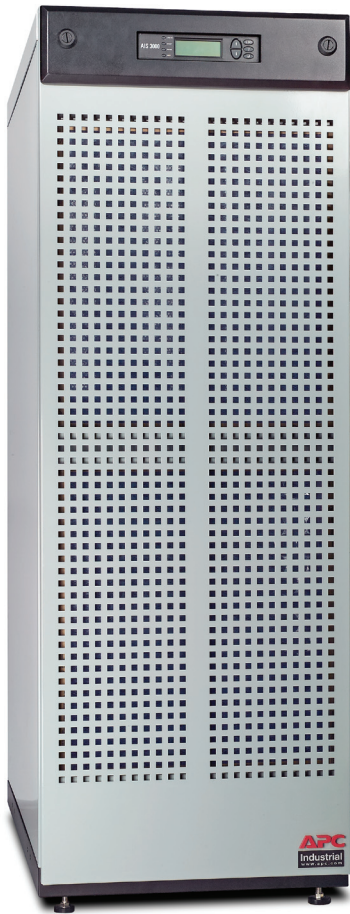
User-replaceable Air Filters
Enables quick and simple replacement of air filters.

Network-manageable
Provides remote management of the UPS over the network.

Scalable Runtime
Allows additional runtime to be quickly added as needed.

AIS® 5000

Reliable industrial power protection for three-phase industrial shop floor applications, automation control rooms and critical processes

Range: 10 - 100kVA

A reliable and cost efficient UPS designed for industrial shop floors, automation control rooms and other critical processes that require high availability, first class quality and performance in an industrial environment, the AIS® 5000 is simple to install and deploy for any three-phase (3:3) application. The built-in maintenance bypass switch and modular design approach assure low Mean Time to Repair and reduced service costs compared to legacy UPSs. The matching battery panels provide a wide variety of runtime needs.

Heavy Duty Design
The ruggedized industrial design of the UPS ensures that it can be installed even in harsh environments.

Parallel-redundant Capable
Increases the overall system availability, 2 units running in parallel with active load sharing.

Galvanic Isolation
Build-in isolation transformers for the rectifier and the inverter ensures galvanic isolation between input / output and the DC bus.

Built-in Manual Bypass
The build-in manual bypass switch eases maintenance and servicing of the unit and safeguards the customers load while performing important annual tests of the unit.

User-replaceable Air Filters
Enables quick and simple replacement of air filters.

Examples of the Industrial space:
- Factory floor
- Warehouse
- Production line
- Control room
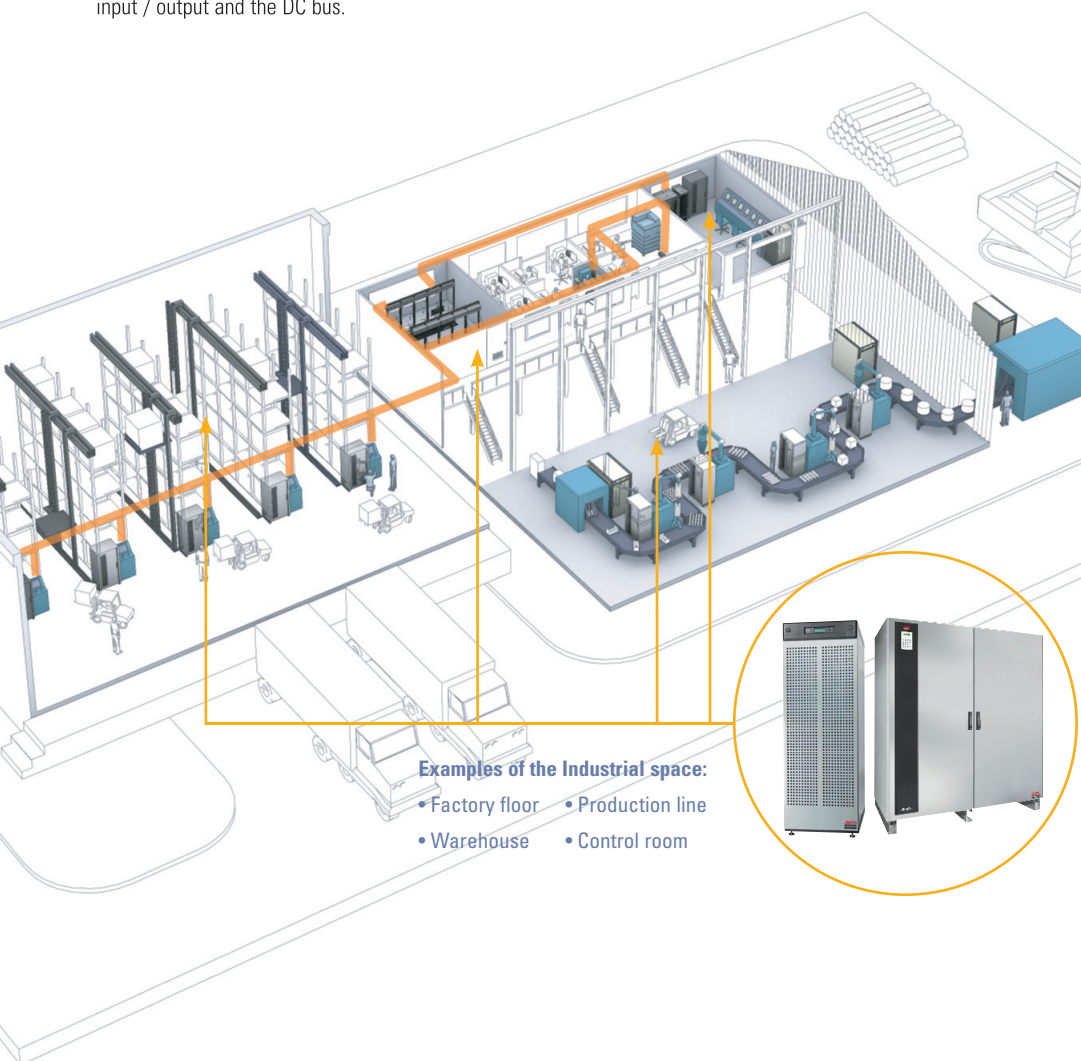
GUTOR Industrial UPS and DC Systems

GUTOR provides custom-built industrial UPS systems, rectifiers and battery chargers which are engineered, manufactured and serviced (AC & DC) solutions used for industrial applications.

Today's modern business and industrial world is rapidly progressing, yet at the same time it is growing more vulnerable and dependent on the availability of quality power supply. GUTOR is specialized in the field of power protection. We aim to provide reliable products of a technologically high standard and top quality customer service. GUTOR primarily designs and develops its own high quality power protection technology. Our UPS systems are applied to meet requirements for applications in the Oil & Gas, Petrochemical, Chemical, and Power Generation industries. All products are of top quality, designed and assembled according to recognized worldwide technical and safety standards.

For more information, go to www.gutor.com

Basic Rack PDU

Power distribution for rack-mount equipment

Range: 1.4 kW - 12.5 kW, 15A - 50A, Horizontal or Vertical Mount

Rack-mountable
Includes horizontal, vertical, and toolless-mount varieties. Puts power where it is needed most - in the racks near the equipment.

Single Input Power Source
Supply power from one branch whip to multiple pieces of equipment, conveniently powering rack-mount equipment. Saves time and money during installation by using one branch whip and standard connections.

Wide Range of Input and Output Connections
Includes a variety of input and output connections to distribute 120V, 208V, or 230V power to multiple outlets. Allow users to adapt to varying power requirements. Units can bring up to 14.4kW using a single branch whip.

Low Cost Power Distribution
Provides a number of outlets to bring power to rack equipment at an affordable price.

Metered Rack PDU

Power distribution units that monitor the aggregate power consumption of connected equipment

Range: 1.4 kW - 14.4 kW, 15A - 50A, Horizontal or Vertical Mount

Local and Web-based Monitoring
Status available to customers both in the data center and remotely.

Local Current Monitoring Display
Helps installers avoid overloaded circuits by providing a visible warning when the current draw is close to the maximum amperage draw of the strip.

Load Indicator LED
Indicates overload and warning conditions based on the user-defined alarm thresholds. Alerts users of potential overloaded circuits.

Alarm Thresholds
Define alarm thresholds in order to avoid overloaded circuits. Network and visual alarms inform the user of possible problems.

Wide Range of Input and Output Connections
Includes a variety of input and output connections to distribute 120V, 208V, or 230V power to multiple outlets. Allows users to adapt to varying power requirements. APC offers units that bring up to 14.4kW using a single branch whip.

Switched Rack PDU

Power distribution that remotely controls power to individual outlets and monitors the aggregate power consumption

Range: 1.4 kW - 12.5 kW, 15A - 50A, Horizontal or Vertical Mount

Remote Management Capabilities
Full-featured network management interfaces that provide standards-based management via Web, SNMP, and Telnet. Access, configure, and manage units from remote locations. Upgrade the firmware via network download to installed units for future product enhancements.

Remote Individual Outlet Control
Users can turn outlets off that are not in use (prevent overloads) or recycle power to locked-up equipment (minimize costly downtime and avoid travel time to equipment).

Power Delays
Users can configure the sequence in which power is turned on or off for each outlet to avoid in-rushes at

start-up. Sequencing also allows users to predetermine which piece of equipment is turned on first so other equipment dependant on that unit will function properly.

Alarm Thresholds
Define alarm thresholds in order to avoid overloaded circuits. Network and visual alarms inform the user of possible problems.

Local Current Monitoring Display
The aggregate current draw per power distribution unit is displayed on the unit via a digital display. The local digital display helps installers avoid overloaded circuits by providing a visible warning when the current draw is close to the maximum amperage draw of the strip.

Smart Distribution Panel with Automatic Transfer Switch (ATS)

Manages and delivers redundant power paths to the InfraStruXure™ system

Range: 250A, 400A, & 800A

The Smart Distribution Panel with Automatic Transfer Switch (ATS) integrates an ATS and electrical distribution panel to lower total cost-of-ownership while improving overall availability. The compact, pre-engineered design decreases installation time, minimizes one-time engineering costs and reduces the overall footprint. In addition, the device is rich with availability features such as open and closed transfer capabilities, superior device manageability (via the web, InfraStruXure Manager, or locally), and the ability to view numerous system alarms. When coupled with APC's Standby Power Generator, the solution monitors critical fluid levels, provides real-time calculations to alert users of available runtime given the current load and remaining fuel and automatically schedules generator and system load tests. Also, because the Smart Distribution Panel with ATS is designed to integrate with the InfraStruXure architecture, it is pre-engineered and sized to work with InfraStruXure solutions and contains many common features, such as pre-installed and pre-tested breakers.

Integrated Distribution Panel
The power distribution panel is integrated into the ATS, eliminating the need to install a separate distribution panel.

Fuel Level Converted to Actual Runtime
Runtime calculation is based on the remaining fuel and generator load.

ATS and UPS Coordination
The ATS and UPS are designed to work together seamlessly in the event of power loss.

InfraStruXure™ Manager Compatible
Enables centralized management via APC's InfraStruXure Manager.

Predictive Failure Alarms
Provide information about possible failures before they happen.

PowerShield™

Complete line of reliable and flexible customer premise powering solutions for broadband telecommunication applications

Output: (Up To) 150W @ 48VDC; (Up To) 75W @ 12VDC

APC's PowerShield™ solution offers service providers that are deploying broadband fiber to the home/premises (FTTH/P), Hybrid Fiber-Coax (HFC), and/or wireless local loop networks a simple, reliable, and cost effective uninterruptible power source for customer premises equipment. In the case of FTTH/P networks, for instance, PowerShield offers a customer premises powering solution that, not only ensures that primary-line telephone service remains available in the event of a utility power failure, but also requires lower initial capital investment and has lower operational costs than competing powering technologies.

Cold-start Capable
PowerShield™ can be turned on with a new charged battery, even if utility power is not available.

Automatic Self-test
Periodic battery self-test ensures early detection of a battery that needs to be replaced.

Hot-swappable Batteries
Ensures clean, uninterrupted power to protected equipment while batteries are being replaced.

User-replaceable Batteries
Battery replacement is simple and safe, and can be performed by the end-user. A technician is not required to replace the PowerShield battery.

Intelligent Battery Management
Maximizes battery performance, life, and reliability through intelligent, precision charging.

Global Safety Approvals
UL60950, CSA60950, IEC60950, EN60950 safety approvals. Meets IEC 61000-4-5 Immunity to Surge, and GR-1089-CORE, Section 4, Lightning and AC Power Faults standards.

IT Environment	Range	Best Price ("Good")	Best Value `("Better")	Best Performance ("Best")
PC/Workstation				
UPS	350-1500VA	Back-UPS® ES	Back-UPS® CS	Back-UPS® RS
Surge Protection	1-11 outlets	SurgeArrest® Essential	SurgeArrest® Home/Office	SurgeArrest® Performance

Back-UPS® RS
High performance battery backup and protection for business computers

Range: 500VA - 1500VA

The fully featured, high performance Back-UPS®RS series offers maximum protection in a versa-tile design. Up to six battery backup outlets with automatic voltage regulation (AVR) enable you to work through even the most frequent brownouts and power sags, conserving your battery power for when you need it most. The RS series provides both Ethernet and telephone data line surge protection, safeguarding against surges entering via network connections. Models include PowerChute Personal Edition software and can be placed either on the floor, desktop or shelf.

Battery-protected and Surge-only Outlets
Reserves power capacity and run time for connected equipment that require battery back-up while providing surge only protection for less critical equipment.

Power Conditioning
Protects connected loads from surges, spikes, lightning, and other power disturbances.

Boost and Trim Automatic Voltage Regulation (AVR)
Automatically corrects low and high voltage condi-tions, allowing you to work through brownouts and overvoltages without discharging the battery. This saves battery life, increases uptime, and improves your productivity.

LED Status Indicators
Enables quick understanding and response to visual indicators showing UPS status.

Equipment Protection Policy
Lifetime : $150,000 (not available in all regions).

Safety-agency Approved
Ensures the product has been tested and approved to work safely with the connected service provider equip-ment and within the specified environment. UL, FCC, CE, C-Tick approvals.

USB Connectivity
Provides management of the UPS via keyed RJ45-USB Cables.

Serial Connectivity
Provides management of the UPS via keyed RJ45-Serial Codes.

Back-UPS® CS
Best value battery backup and protection for business computers

Range: 350VA - 650VA

The Back-UPS® CS offers professional-grade power protection for office systems with three battery backup outlets and three "surge only" outlets. Along with data line surge protection and safe system shutdown software, sophisticated power management features and pro-active audio-visual status indicators ensure that your office systems and their valuable data are pro-tected from dangerous power surges, spikes and blackouts. Serial or USB connectivity gives users more flexibility making installation quicker and easier.

Battery-protected and Surge-only Outlets
Reserves power capacity and run time for connected equipment that require battery back-up while providing surge only protection for less critical equipment.

Power Conditioning
Protects connected loads from surges, spikes, lightning, and other power disturbances.

USB Connectivity
Provides management of the UPS via a USB port via keyed RJ45-USB cables (not available on all models).

Serial Connectivity
Provides management of the UPS via keyed RJ45-Serial Cables (not available on all models).

Equipment Protection Policy
Lifetime : $100,000 (not available in all regions).

LED Status Indicators
Enables quick understanding and response to visual indicators showing UPS status.

Back-UPS® ES

Best Value battery backup and protection for home computers

Range: 325VA - 750VA

Designed for the home and home office, Back-UPS® ES series offers affordable battery backup and surge protection with up to ten outlets. Models provide phone, fax, and modem protection and include easy-to-install safe system shutdown software with USB connectivity.

Battery-protected and Surge-only Outlets
Reserves power capacity and run time for connected equipment that require battery back-up while providing surge only protection for less critical equipment.

Power Conditioning
Protects connected loads from surges, spikes, lightning, and other power disturbances.

Data Line Surge Protection
Provides protection of connected equipment from power surges on the data lines.

Equipment Protection Policy
Lifetime : $75,000 (not available in all regions).

Transformer-block Spaced Outlets
Protect equipment with input transformer blocks without blocking access to other receptacles.

USB Connectivity
Provides management of the UPS via a USB port via keyed RJ45-USB cables (not available on all models).

Back-UPS® HS

Superior power management and protection for dataline panel box and home networking equipment

Range: 500VA

The Back-UPS® HS 500 is a complete management and power protection solution for your structured wiring and home networking applications. Remotely manage your UPS and control the four battery backup outlets via Web browser. Stay informed with five status LED indicators and remain protected with telephone, network, and co-axial/cable data line surge protection.

Data Line Surge Protection
Provides protection of connected equipment from power surges on the data lines.

Network Manageable
Provides remote management of the UPS over the network.

LED Status Indicators
Quickly understand UPS status with indicators.

Battery Replacement Without Tools
Allows quick, easy battery replacement.

Battery-protected and Surge-only Outlets
Reserves power capacity and run time for connected equipment that require battery back-up while providing surge only protection for less critical equipment.

Equipment Protection Policy
Lifetime : $100,000 (not available in all regions).

Back-UPS for Office and Business Computers: Why Is Protection Important?

Availability of the desktop is important. For many businesses, keeping each or at least some of their desktops up and running is essential in preventing lost sales or business. The cost of one instance of downtime will almost always exceed the cost of a battery backup unit.

Data created and stored on a desktop is often too valuable to risk losing. The value of the data

stored and used on business workstations and desktops will often times exceed the cost of the hardware itself. In any distributed network, work in progress may not be covered, stored or backed up by the server when power is lost.

The cost of repairing or replacing hardware can be expensive and time consuming. At the very least, companies should make the minimal investment in surge protection products.

SurgeArrest® Essential*
Basic surge protection for computers and home electronics

1, 4 or 7 outlets, with or without phone surge protection, direct plug in, 4ft or 6ft cord length.

Power surges and spikes can destroy your electronic equipment. SurgeArrest® Essential will provide basic protection against these dangerous power fluctuations

- Basic protection against surges and spikes.

- Protection working indicator provides proactive notification of protection readiness.

- Building wiring fault indicator provides proactive notification of wiring problems.

- 1, 4, 5, 6 and 7 outlet models available.

- EMI/RFI filters attenuates line noise filters surge protector attenuates EMI/RFI line noise that can cause data errors and keyboard lockups, ensuring better performance of protected equipment.

- Some models offer telephone line surge protection jacks. It is very important to protect your equipment from "back door" surges traveling through data lines, as they can be as damaging to your equipment as surges traveling over power lines.

SurgeArrest® Home/Office*
Reliable surge protection for home or office computers and electronic equipment

6 or 8 outlets, with and without Coaxial protection.

APC's new SurgeArrest® Home/Office was designed in response to customer requests for additional safety and convenience features. Plug-activated safety shutters and cord management features were added to provide increased security and ease of use. Advanced power line and data line surge protection prevents damaging surges and spikes from reaching your sensitive equipment.

- Advanced protection against surges and spikes.

- Dataline surge protection jacks (phone, Ethernet and Coax available; varies by model) protects against surges traveling over data lines.

- Protection working' indicator provides proactive notification of protection readiness.

- Building wiring indicator provides proactive notification of wiring problems.

- 180 degree rotating cord allows for flexibility in placement.

- Cord management guide helps reduce cord clutter.

- 6 and 8 outlet models available.

SurgeArrest® Performance*
High performance surge protection for computers & electronics

8 and 11 outlets, with and without Ethernet protection.

The SurgeArrest® Performance provides maximum protection against surges, spikes and even lightning. Multi-stage surge protection and noise filter circuitry reduces these dangerous disturbances to harmless levels. With the same safety and convenience features of the SurgeArrest® Home/Office family, the SurgeArrest® Performance is ideal for high end computer electronic systems.

- Superior protection against surges and spikes.

- Data line surge protection jacks (phone, Ethernet and Coax available; varies by model) protects against surges traveling over data lines.

- Protection working indicator provides proactive notification of protection readiness.

- Building wiring indicator provides proactive notification of wiring problems.

- Overload indicator proactively warns of circuit overload.

- 180 degree rotating cord allows for flexibility in placement.

- Cord management guide helps reduce cord clutter.

* Outlet type and product style varies by country.

ProtectNet®

Stand-alone data line surge suppression for network, telecommunication, PC and AV systems

- Protects equipment from surges traveling over data lines.

- Models available for Ethernet, Coax, digital telephone, analog telephone, Thinnet and Serial RS232 lines.

Power Ready Notebook Cases

Helping mobile professionals stay organized, protected, and connected

- Add APC's Universal Power Adapter (see below) to charge your notebook, phone and PDA simultaneously within the case from any single air, auto or ac power outlet.

- Universal notebook compartment.

- Convenient carrying case - designed for easy access to all your mobile devices.

- Organizer panel - easy access organizer panel helps keep important belongings at quick reach.

- Shock absorbing shoulder strap - removable and adjustable strap is contoured and padded to provide maximum comfort with extreme loads.

- Removable, spill-proof pouch - designed to keep your personal belongings secure and hidden.

- Security strap - securely attaches the case directly on top of a roller case (backpack excluded).

Rack-mount ProtectNet®

Modular data line surge supression for network, telecommunication, PC and AV systems

- Protects equipment from surges traveling over data lines.

- Individual modules can be rack-mounted into any 19" rack using the PRM24 1U chassis.

- Modules can be mixed and matched to suit a particular environment.

- Modules can be replaced individually without interrupting other lines.

- Models available for Ethernet, Coax, digital telephone, analog telephone and Serial RS232 lines.

Universal Notebook Batteries

Portable computer batteries for the leading brands of notebook computers

- Notebook adapter tips included - Allows compatibility with leading brands of notebook computers.

- Slim, lightweight design - Saves space and weight.

- Four LED status indicators - Visually indicates the battery's current state of charge.

- Adjustable output voltage setting - Allows compatibility with leading brands of notebook computers.

Universal Power Adapters

Portable power for notebook computers and mobile devices

- Accepts power from auto, plane or wall sockets - so you can access power anywhere you go.

- Notebook adapter tips included - allows compatibility with leading brands of notebook computers.

- Replaces multiple power adapters - saves space and weight.

- USB power port - charges two mobile devices simultaneously, in addition to notebook computer.

- Adjustable output voltage setting - allows compatibility with leading brands of notebook computers.

- LED Status Indicator - visually indicates the unit's current status.

APC Tailors InfraStruXure™ for Specific Applications

New Systems Address NCPI Issues
Particular to Key Data Center Applications

In today's information technology environment, organizations deal with many changes, from increasing IT productivity while integrating existing systems, to providing increased business value and real-time enterprises, to supporting regulatory compliance. In many cases, this can result in new technology deployments such as blade servers, changes to the IT environment, converged networks and new enterprise capabilities. These business and technology trends are forging new types of IT environments with a need to quickly and effectively deploy key applications such as:

- *High Density Deployment*
- *First-time Data Center Users*
- *VoIP Deployment*
- *Data Center Restructuring*

APC's InfraStruXure™ availability architecture can now address NCPI issues for these key applications with integrated systems designed specifically for these applications. The systems, which integrate power, cooling, management and services in a rack-optimized architecture are designed to increase availability and agility while reducing total cost of ownership.

To help your speed of deployment as well as future adaptability, these applications systems include a range of unique features such as pre-engineered integrated systems to minimize design time, fully-assembled delivery, quick connect components and many mobile and turnkey features. These agile systems help to address ever-changing business needs, making it ideal for technology rollouts/refreshes or changes to your IT environment.

Availability is certainly a critical factor in any IT environment. Availability can be improved with systems that are designed and tested for each particular application. Innovative solutions including new in-row cooling systems dramatically improve cooling predictability (on a rack- and row-level) up to 30kW per rack. New environmental and security access devices improve security, and new management tools, standardized components and services are designed to reduce human error with logic tools and plug-able design approach.

Finally, with the need for increased IT productivity, your total cost of ownership will be improved as well, up to 35%. With energy costs a major percentage of data center operation, InfraStruXure's energy-efficient cooling systems can significantly reduce operating expenses. In addition, the initial capital costs are reduced with compact rack-based design, system-level pricing and "right-sized" power components that minimize the need for over-sizing your data center.

As with any of the standardized, modular InfraStruXure™ designs, these systems can be provided as turnkey solutions or with any range of customization. These new InfraStruXure™ Systems for Applications are designed to ensure your key applications are successfully deployed.

InfraStruXure™ Systems for High Density

The deployment of new technology such as blade servers and server consolidation can easily create high-density environments. APC has a range of resources and solutions targeted specifically for high-density applications such as blade servers. All are designed to improve system availability and agility, allowing quick and effective deployment in data centers of all sizes while offering the lowest total cost of ownership (TCO).

InfraStruXure™ Systems for Data Center Restructuring

Mergers and acquisitions, outsourcing and business process innovation all make the world of business an unpredictable place. In response, data centers today have to be more agile, or capable of changing in a short period of time. Whether you are moving from a traditional data center, adding a disaster recovery center, or even in the process of server consolidation or business expansion, APC's pre-engineered solutions take the guesswork out of data center NCPI design.

InfraStruXure™ Systems for 1st Time Data Center and Server Room Users

The challenges of improving, and even maintaining IT productivity, have put un-experienced pressures on today's IT and Facility Managers. Converging networks (with major upgrades and modifications) while ensuring strong business continuity and disaster recovery strategy, is an overwhelming task. APC InfraStruXure™ Systems are ideal for departments with limited experience or resources in designing, operating and building data centers and server rooms.

InfraStruXure™ Systems for VoIP

If you're planning to deploy (or have deployed) Voice over Internet Protocol (VoIP) or IP Telephony, your converged network carrying data and voice becomes very critical. Your tolerance for downtime becomes zero. APC InfraStruXure™ Systems can support your entire Voice over IP network, including protection for IP phones, access points, wiring closets, Intermediate Distribution Frames (IDFs), Main Distribution Frames (MDFs) and the entire data center.

APC is Continually Expanding InfraStruXure™ System's Integrated Solution Set

The revolutionary **InfraStruXure™ with Integrated Power Generation** combines a generator with an integrated automatic transfer switch (ATS) and distribution panel to provide extended on-site backup power for data centers.

APC now offers **InfraStruXure with Integrated Fuel Cells** providing hours of extended runtime for IT applications with high availability requirements. The integrated solution offers IT professionals the ability to provide power generation for their IT systems using fuel cell technology, an alternative to traditional extended-run options.

The Smart-UPS VT family now includes **Smart-UPS VT InfraStruXure** models which feature integrated Smart-UPS VT power modules, hot swappable batteries, and integrated power distribution in one space saving rack.

Since 1981, APC has been a global leader in power availability solutions, setting the industry standard for quality, innovation, and support. From its corporate headquarters in West Kingston, Rhode Island, APC operates sales offices throughout the world and manufacturing facilities on four continents and distribution facilties on five continents. APC ships products to over 150 countries.

Over 15 million satisfied customers worldwide depend on APC's Legendary Reliability™. Propelled by real-world experience and a drive towards technological innovation, APC has the experience, scale, global presence, and stability to respond to emerging IT availability needs.

As the recipient of hundreds of awards worldwide, APC is recognized for excellence in both its business and product performance. Every year since 1999, APC has been named to the Forbes Platinum 400 list of the Best Big Companies in America. For 11 years in a row, APC has received the Channel Champion award in the UPS category.

Learn how multiple power problems can wreak havoc with your electronic equipment. Download the FREE APC White Paper "The Seven Types of Power Problems". Visit us online at **http://promo.apc.com** and enter key code **g309x**.

APC
Legendary Reliability®

Smart-UPS SC / Smart-UPS — Runtime @ Full Load Capacity (minutes)

Form	APC Part Number	Capacity (Volt Amps/Watts)	Standard Runtime	Input	Output
Rack mount	SC450RM1U*	450 / 280	6	5-15P	(4) NEMA 5-15R
	SUA750RM2U	750 / 480	5		(6) NEMA 5-15R
	SUA1500RM2U	1500 / 980	7		
	SUA2200RM2U	2200 / 1980	5	5-20P	(6) NEMA 5-15R, (2) NEMA 5-20R
	SUA3000RM2U	3000 / 2700	3	L5-30P	
Tower	SC450RM1U*	450 / 280	6	5-15P	(4) NEMA 5-15R
	SUA750	750 / 500	5		(6) NEMA 5-15R
	SUA1500	1500 / 980			(8) NEMA 5-15R
	SUA2200	2200 / 1980		5-20P	(8) NEMA 5-15R, (2) NEMA 5-20R
	SUA3000	3000 / 2700		L5-30P	

Smart-UPS XL — Runtime @ Full Load Capacity (minutes)

Form	APC Part Number	Capacity (Volt Amps/Watts)	Standard Runtime	Standard + (1) External Battery Pack	Standard + (2) External Battery Pack	APC Battery Pack Part Number	Input	Output
Rack mount	SU1400RMXLB3U	1400 / 1050	7	32	70	SU24R2XLBP	5-15P	(6) NEMA 5-15R
	SUA2200RMXL2U	2200 / 1580	6	21	50	SUA48RMXLBP3U	5-20P	(9) NEMA 5-15R, (2) NEMA 5-20R
	SUA3000RMXL3U	3000 / 2700	7	35	75		L5-30P	
Tower	SUA1000XL	1000 / 800	10	65	88	SUA24XLBP	5-15P	(8)NEMA 5-15R
	SUM1500RMXL2U*	1500 / 1425	12	38	69	SUM48RMXLBP2U		
	SUM3000RMXL2U*	3000 / 2850	3	16	32		L5-30P	(6) NEMA 5-15R, (2) NEMA 5-20R

Smart-UPS RT* — Runtime @ Full Load Capacity (minutes)

Form	APC Part Number	Capacity (Volt Amps/Watts)	Standard Runtime	Standard + (1) External Battery Pack	Standard + (2) External Battery Pack	APC Battery Pack Part Number	Input	Output
Rack mount	SURTA1500RMXL	1500 / 1050	9	39	71	SURTA48RMXLBP	5-15P	(6) NEMA 5-15R
	SURTA3000RMXL	3000 / 2100	15	57	102	SURT192RMXLBP	L5-30P	(6) NEMA 5-15R, (2) NEMA 5-20R
	SURT5000RMXLT-1TF5	5000 / 3500	5	27	50		L6-30P	(12) 5-20R, (2) L6-20R, (1) L6-30R
	SURT10000RMXLT-2TF5	10000 / 8000	4	11	20		Hard Wire 3-wire	(1) Hard Wire 3-wire, (24)NEMA 5-20R, (2) NEMA L6-20R
Tower	SURTA1500XL	1500 / 1050	9	39	71	SURTA48XLBP	5-15P	(6) 5-15R
	SURTA3000XL	3000 / 2100	15	57	102	SURT192XLBP	L5-30P	(6) NEMA 5-15R, (2) NEMA 5-20R
	SURT5000XLT-1TF3	5000 / 3500	5	27	50		L6-30P	(8) 5-20R, (1) NEMA L14-30R, (4) NEMA L6-20R, (2) NEMA L6-30R
	SURT10000XLT-2TF3	10000 / 8000	4	11	20		Hard Wire 3-wire	(1) Hard Wire 3-wire, (16) NEMA 5-20R, (2) NEMA L14-30R, (6) NEMA L6-20R, (2) NEMA L6-30R

Symmetra / Symmetra LX* — Runtime @ Full Load Capacity (minutes)

Form	APC Part Number	Capacity (Volt Amps/Watts)	Standard Runtime	Standard + (1) External Battery Frame	Standard + (2) External Battery Frames	APC Battery Frame Part Number	Input	Output
Rack mount	SYH4K6RMT-P1	4000 / 2800	13	51	92	SYRMXR4B4	L6-30P	(2) NEMA L6-20R, (12) NEMA 5-20R
	SYH6K6RMT-P1	6000 /4200	12	38	65			
	SYA8K16RMP	8000 / 6400	6	62	123	SYARMXR9B9	208/240V Hardwire 4-Wire	(4) NEMA L14-30R, (8) NEMA L5-20R, 208/240 & 120V Hardwire 4-Wire
	SYA12K16RMP	12000 / 9600	6	43	82			
	SYA16K16RMP	16000 / 12800	6	33	62			
Tower	SYA8K16P	8000 / 6400	6	62	123	SYAXR9B9	208/240V Hardwire 4-Wire	208/240 & 120V Hardwire 4-Wire
	SYA12K16P	12000 / 9600	6	43	82			
	SYA16K16P	16000 / 12800	6	33	62			

Plug and Receptacle Types

NEMA 5-15

NEMA 5-20

NEMA L6-20

NEMA L6-30

NEMA L14-30
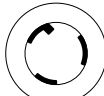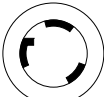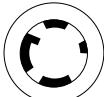
Models are rack/tower convertible
For the most recent sizing information and additional runtime options consult www.apc.com

Network and Server
UPS Runtime Estimates at a Glance

Smart-UPS SC / Smart-UPS   Runtime @ Full Load Capacity (minutes)

Form	APC Part Number	Capacity (Volt Amps/Watts)	Standard Runtime	Input	Output
Rack mount	SUA750RM1UJB	750 / 480	6	5-15P	(4) NEMA 5-15R
	SUA1500RM2UJB	1500 / 980	7		(6) NEMA 5-15R
	SUA3000RMJ2UB	3000 / 2700	3	L5-30P	(6)NEMA 5-15R, (2)NEMA 5-20R
Tower	SUA500JB	500 / 360	9	5-15P	(6) NEMA 5-15R
	SUA750JB	750 / 500	5		
	SUA1500JB	1500 / 980	7		(8) NEMA 5-15R
	SUA2200JB	2200 / 1980	5	L5-30P	(8)NEMA 5-15R, (2)NEMA 5-20R
	SUA3000JB	3000 / 2700	5		

Smart-UPS RT*   Runtime @ Full Load Capacity (minutes)

Form	APC Part Number	Capacity (Volt Amps/Watts)	Standard Runtime	Standard + (1) External Battery Pack	Standard + (2) External Battery Pack	APC Battery Pack Part Number	Input	Output
Rack mount	SURTA1500XLJ w/SURTRK	1500 / 1050	8	39	71	SURTA48XLBPJ W/SURTRK	5-15P	(6) NEMA 5-15R
	SURT5000XLJ-1TF4 w/SURTRK2	4600 / 3500	5	27	50	SURT192XLBPJ	L6-30	(8)NEMA 5-20R, (2)NEMA L5-20R, (3)NEMA L6-20R
	SURT7500XLJ-2TF4 w/SURTRK2	7500 / 6000	7	16	28		Hard Wire 3-wire	(16)NEMA 5-20R, (4)NEMA L5-20R, (4)NEMA L6-20R, (2)NEMA L6-30R
	SURT10000XLJ-2TF4 w/SURTRK2	10000 / 8000	4	11	20			
Tower	SURTA1500XLJ	1050 / 1500	8	39	71	SURTA48XLBPJ	5-15P	(6) NEMA 5-15R
	SURT5000XLJ-1TF4	5000 / 3500	5	28	52	SURT192XLBPJ	L6-30	(8)NEMA 5-20R, (2)NEMA L5-20R, (3)NEMA L6-20R, (2)NEMA L6-30R
	SURT7500XLJ-2TF4	7500 / 6000	7	16	28		Hard Wire 3-wire	Hard Wire 3-wire, (16)NEMA 5-20R, (4)NEMA L5-20R, (4)NEMA L6-20R, (2)NEMA L6-30R
	SURT10000XLJ-2TF4	10000 / 8000	4	11	20			

Symmetra / Symmetra LX*   Runtime @ Full Load Capacity (minutes)

Form	APC Part Number	Capacity (Volt Amps/Watts)	Standard Runtime	Standard + (1) External Battery Frame	Standard + (2) External Battery Frame	APC Battery Frame Part Number	Input	Output
Rack mount	SYH4K6RMJ-P1	4000 / 2800	12	51	92	SYRMXR4B4J	L6-30P	(2) NEMA L6-20R, (12) NEMA 5-20R
	SYH6K6RMJ-P1	6000 /4200	12	38	65			
	SYA8K8RMJ	8000 / 5600	8	28	50	SYARMXR3B3J	Hard Wire 4-wire	(4)NEMA L5-20R, (2)NEMA L14-30R, (1)Hard Wire 4-wire
	SYA12K16RMJ	12000 / 8400	8	21	35			(8)NEMA L5-20R, (4)NEMA L14-30R, (1)Hard Wire 4-wire
	SYA16K16RMJ	16000 / 11200	8	18	28			
Tower	SYA8K16JXR	8000 / 5600	8	72	143	SYAXR9B9J	Hard Wire 4-wire	(1)Hard Wire 4-wire
	SYA12K16JXR	12000 / 8400	8	58	110			
	SYA16K16JXR	16000 / 11200	8	40	74			

Models are rack/tower convertible
For the most recent sizing information and additional runtime options consult *www.apc.com*

Plug and Receptacle Types

NEMA 5-15   NEMA 5-20
NEMA L6-20
NEMA L6-30   NEMA L14-30

Network and Server
UPS Runtime Estimates at a Glance

Smart-UPS SC / Smart-UPS   Runtime @ Full Load Capacity (minutes)

Form	APC Part Number	Capacity (Volt Amps/Watts)	Standard Runtime	Input	Output
Rack mount	SC450RMI1U*	450 / 280	6	IEC-320 C14	(4) IEC 320 C13
	SUA750RMI2U	750 / 480	5		
	SUA1500RMI2U	1500 / 980	7		
	SUA2200RMI2U	2200 / 1980	5	IEC-320 C20	(8) IEC 320 C13, (1) IEC 320 C19
	SUA3000RMI2U	3000 / 2700	3		
Tower	SC450RMI1U*	450 / 280	6	IEC-320 C14	(4) IEC 320 C13
	SUA750I	750 / 500	5		(6) IEC 320 C13
	SUA1500I	1500 / 980			(8) IEC 320 C13
	SUA2200I	2200 / 1980		IEC-320 C19	(8) IEC 320 C13, (1) IEC 320 C19
	SUA3000I	3000 / 2700			

Smart-UPS XL   Runtime @ Full Load Capacity (minutes)

Form	APC Part Number	Capacity (Volt Amps/Watts)	Standard Runtime	Standard + (1) External Battery Pack	Standard + (2) External Battery Pack	APC Battery Pack Part Number	Input	Output
Rack mount	SU1400RMXLIB3U	1400 / 1050	7	35	75	SU24R2XLBP	IEC-320 C14	(8) IEC 320 C13
	SUA2200RMXLI2U	2200 / 1580	7	36	76	SUA48RMXLBP3U		(9) IEC 320 C13
	SUA3000RMXLI3U	3000 / 2700	6	21	50		IEC-320 C20 British BS1363A Schuko CEE 7/EU1-16P	(8) IEC 320 C13, (1) IEC 320 C19
Tower	SUA1000XLI	1000 / 800	10	65	88	SUA24XLBP	IEC-320 C14	(8) IEC 320 C13
	SUM1500RMXLI2U	1500 / 1425	12	38	69	SUM48RMXLBP2U		(9) IEC 320 C13
	SUM3000RMXLI2U	3000 / 2850	3	16	32		IEC-320 C20	(7) IEC 320 C13, (1) IEC 320 C19

Smart-UPS RT*   Runtime @ Full Load Capacity (minutes)

Form	APC Part Number	Capacity (Volt Amps/Watts)	Standard Runtime	Standard + (1) External Battery Pack	Standard + (2) External Battery Pack	APC Battery Pack Part Number	Input	Output
Rack mount	SURT1000RMXLI	1000 / 700	10	53	99	SURT48RMXLBP	IEC-320 C14	(6) IEC 320 C13
	SURT3000RMXLI	3000 / 2100	14	57	102	SURT192RMXLBP	IEC-320 C20, British BS1363A, Schuko CEE 7/EU1-16P	(8) IEC 320 C13, (2) IEC 320 C19
	SURT5000RMXLI	5000 / 3500	5	27	50		Hard Wire 3-wire	(8) IEC 320 C13, (2) IEC 320 C19
	SURT10000RMXLI	10000 / 8000	4	11	20		Hard Wire 3-wire, Hard Wire 5-wire	(1) Hard Wire 3-wire, (4) IEC 320 C13, (4) IEC 320 C19
Tower	SURT1000XLI	1000 / 700	10	53	99	SURT48XLBP	IEC-320 C14	(6) IEC 320 C13
	SURT3000XLI	3000 / 2100	14	57	102	SURT192XLBP	IEC-320 C20 British BS1363A Schuko CEE 7/EU1-16P	(8) IEC 320 C13, (2) IEC 320 C19
	SURT5000XLI	5000 / 3500	5	27	50		Hard Wire 3-wire	(8) IEC 320 C13, (2) IEC 320 C19
	SURT10000XLI	10000 / 8000	4	11	20		Hard Wire 3-wire, Hard Wire 5-wire	(1) Hard Wire 3-wire, (4) IEC 320 C13, (4) IEC 320 C19

Symmetra / Symmetra LX*   Runtime @ Full Load Capacity (minutes)

Form	APC Part Number	Capacity (Volt Amps/Watts)	Standard Runtime	Standard + (1) External Battery Frame	Standard + (2) External Battery Frame	APC Battery Frame Part Number	Input	Output
Rack mount	SYH4K6RMI	4000 / 2800	13	51	92	SYRMXR4B4I	Hard Wire 3-wire	(8) IEC 320 C13, (2) IEC 320 C19
	SYH6K6RMI	6000 /4200	13	38	65			
	SYA8K8RMI	8000 / 5600	7	72	143	SYARMXR9B9I		(1) Hard Wire 3-wire, (8) IEC 320 C13, (6) IEC 320 C19
	SYA12K16RMI	12000 / 8400	8	50	95		Hard Wire 3-wire, Hard Wire 5-wire	(1) Hard Wire 3-wire, (8) IEC 320 C13, (10) IEC 320 C19
	SYA16K16RMI	16000 / 11200	8	39	72			
Tower	SYA8K8I	8000 / 5600	7	72	143	SYAXR9B9I	Hard Wire 3-wire	(1) Hard Wire 3-wire
	SYA12K16I	12000 / 8400	7	50	95		Hard Wire 3-wire, Hard Wire 5-wire	
	SYA16K16I	16000 / 11200	8	39	72			

Plug and Receptacle Types

IEC Connector

*Models are rack/tower convertible

For the most recent sizing information and additional runtime options consult www.apc.com